Control Data® 9715-500 **Fixed Storage Drive (FSD)**

Designed for Original Equipment Manufacturers (OEM)



MAY

1983

The Control Data 9715-500 Fixed Storage Drive (FSD) is a 230-millimeter (9-inch) rigid disk drive that provides 516 megabytes of unformatted storage in a sealed module. Drive characteristics include 20-millisecond average seek time, approximately 250 watts power consumption and one-half rack size.

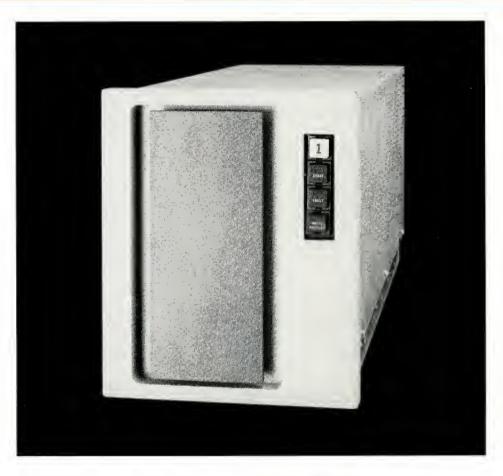
The 9715-500 operates with a 14.5 megahertz Storage Module Drive (SMD) interface or Intelligent Standard Interface (ISI). A direct coupled, DC brushless drive motor and a universal power supply permit worldwide use of the 9715-500. Physical dimensions of the drive allow side-byside mounting, providing over 1 billion bytes of storage in a standard 483millimeter (19-inch) RETMA rack enclosure.

Features

- 20-millisecond average seek
- Rack mountable
- Detachable, univeral power supply
- High MTBF
- Low maintenance cost
- 14.5 megahertz SMD or ISI inter-
- Automatic carriage and spindle lock
- High performance linear actuator
- NRZ to RLL 2, 7 data conversion
- Fixed or variable sectoring (address mark)
- Daisy-chain interface capability
- Dual channel option
- UL, CSA, VDE standards
- FCC Class A compliance

Description

The 9715-500 FSD consists of seven disks in a sealed module, a direct coupled DC brushless motor with digital speed control, universal power supply, DC cooling fan, linear actuator



and thin film heads. The logic package uses low-power Schottky. I²L, ECL and LSI technology. All read/ write, fault, transmitter/receiver, and microprocessor-controlled servo electronics are contained within the logic package.

Applications

- Business control systems
- Large terminal systems
- Scientific, medical and instrumentation systems
- Seismic systems
- Communications systems
- Database systems

Accessories

- Rack-mounting slides
- Terminator
- Input/output cables
- DC cables
- Bar mounting kit
- Address select plug (4-7)
- Maintenance manual

Options

- SMD I/O dual access feature
- Intelligent standard interface
- Power supply
- Front panel in color

Specifications

Capacity (unformatted) 516 Mbytes Per Track 30,240 bytes

Per Cylinder 725,760 bytes Cylinders Per Drive

Number of Disks 7 **Data Surfaces** 12 Servo Surfaces 1 24 **Data Heads**

14.52 MHz Transfer Rate Spindle Speed 3.600 r/min

Recording

14.6 Mbits/in² Bit Density Bits Per Inch 15.159 Tracks Per Inch 960

Recording Method NRZ TO RLL 2, 7 data conversion

Access Time

Full Stroke 45 ms 20 ms Average 5 ms Track-to-Track

Positioning Method Linear voice coil actuator

Data Reliability

Recoverable Read Errors Less than 1 in 1010 bits transferred Unrecoverable Read Errors Less than 1 in 1012 bits transferred Less than 1 in 10⁶ seek operations Seek Errors

Drive Reliability

15,000 hours, **MTBF**

11,250 hours, including power supply

Service Life 5 years Preventive Maintenance None None

Adjustments

Power

120, 220, 230 and 240 V, AC

50 or 60 Hz

±5 V logic, ± 24 V control addressing, DC

+ 40 V spindle motor

Power Dissipation Approx. 250 W

Environmental

10°C to 45°C (50°F to 114°F) Operating Temperature Non-Operating Temperature -40° C to 60° C (-40° F to 140° F)

20% to 80% **Operating Humidity**

Physical Characteristics

259 mm (10.2 in) Height Width 216 mm (8.5 in)

762 mm (30 in) with power supply Depth 610 mm (24 in) without power supply

31 kg (70 lb), drive Weight

37 kg (82 lb), including power supply

Specifications subject to change without notice.

Control Data sales offices are located in principal cities throughout the world.

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